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ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
12821A LANCE, MISSILE NUMBER 4819, ROJND NUMBER 335 NCL, 13 AUG--ETC(U)

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LEVEL II

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METEOROLOGICAL DATA REPORT

12821A LANCE
Missile No. 4819
Round No. 335 NCL
13 August 1979

by

White Sands Meteorological Team

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ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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UNITED STATES ARMY ELECTRONICS COMMAND

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19. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the Launching of T2821A LANCE, Missile Number 4819, Round Number 335 NCL, are presented by tabular forms. 410 6.3 J-42		

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

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INTRODUCTION

12821A LANCE, Missile Number 4819, Round Number 335NCL, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1500-MDT, 13 August 1979. The scheduled launch time was 1500 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the EC-30 Met Site at T-0 minutes.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from Single Theodolite pibal observation at:

SITE AND ALTITUDE

Holloman AFB 1450 MDT 2190 Meters
Holloman AFB 1500 MDT 3660 Meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to as high as possible feet in 500-foot increments.

SITE AND TIME

Holloman 1350 MST
Jallen 1350 MST

TABLE 1. Surface Observations taken at 1500 MDT,
13 August 1979, at EC-30, 12821A LANCE,
Missile Number 4819, Round Number 335 NCL.

ELEVATION	3957	FT/MSL
PRESSURE	880.3	MBS
TEMPERATURE	29.0	°C
RELATIVE HUMIDITY	52	%
DEW POINT	18.1	°C
DENSITY	1004	GM/M ³
WIND SPEED	Calm	KTS
WIND DIRECTION		DEGREES
CLOUD COVER	2	cb
CLOUD COVER	2	ac
CLOUD COVER	5	ci

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM Holloman DATE 13 August 1979 TIME 1450 MDT

RELEASE POINT COORDINATES (WSTM) NO SURVEY

MISSILE TYPE 12821A Lance MISSILE NO. 4819 ROUND NO. 335 NCLMISSILE LAUNCHED FROM RATSCAT DATE 13 August 1979 TIME 1500 MDT

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

HEIGHT - METERS AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	330	02
30	330	02
60	332	02
90	335	02
120	337	02
150	339	01
180	340	01
210	340	01
240	343	01
270	345	01
300	348	01
330	348	01
360	349	01
390	350	01
420	330	01
450	320	01
480	312	01
510	300	01

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
540	278	01
570	275	02
600	251	02
630	238	02
660	230	02
690	210	02
720	205	02
750	206	02
780	207	02
810	208	03
840	208	03
870	209	03
900	212	03
930	212	03
960	212	04
990	213	04
1020	213	04
1050	218	04

RELEASED FROM HollomanDATE 13 August 1979 TIME 1450 MDT

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
1080	218	04
1110	222	05
1140	225	05
1170	228	06
1200	230	06
1230	232	06
1260	238	06
1290	239	07
1320	241	07
1350	242	07
1380	240	07
1410	238	07
1440	238	07
1470	236	07
1500	235	07
1530	235	07
1560	232	07
1590	232	07
1620	230	07
1650	230	07
1680	230	07
1710	230	06

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
1740	230	06
1770	230	06
1800	230	06
1830	230	06
1860	231	06
1890	231	06
1920	232	06
1950	234	06
1980	235	06
2010	239	07
2040	240	07
2070	242	07
2100	246	07
2130	248	07
2160	249	08
2190	251	08

PILOT BALLOON MEASURED WIND DATA

TABLE 3

RELEASED FROM Holloman DATE 13 August 1979 TIME 1500 MDT

RELEASED POINT COORDINATED (WSTM) NO SURVEY

MISSILE TYPE 12821A Lance MISSILE NO. 4819 ROUND NO. 335 NCLMISSILE LAUNCHED FROM RATSCAT DATE 13 August 1979 TIME 1500 MDT

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHT - METERS AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	330	02
30	331	02
60	335	02
90	337	02
120	341	02
150	350	02
180	350	02
210	352	02
240	358	02
270	360	02
300	004	02
330	010	02
360	015	02
390	020	02
420	028	02
450	036	02
480	040	02
510	050	02

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
540	060	02
570	078	02
600	084	02
630	090	02
660	098	02
690	100	02
720	110	02
750	116	02
780	125	02
810	140	02
840	140	02
870	148	02
900	150	02
930	160	02
960	161	02
990	170	02
1020	178	02
1050	190	02

RELEASED FROM HollomanDATE 13 August 1979TIME 1500 MDT

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
1080	193	02
1110	196	03
1140	200	03
1170	202	04
1200	210	04
1230	212	04
1260	214	04
1290	216	05
1320	220	05
1350	220	05
1380	220	05
1410	220	05
1440	220	05
1470	220	05
1500	220	05
1530	220	05
1560	220	05
1590	220	05
1620	220	05
1650	220	05
1680	220	05
1710	220	05
1740	218	05
1770	218	05
1800	218	05

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
1830	217	06
1860	216	06
1890	215	06
1920	214	06
1950	213	06
1980	213	06
2010	213	06
2040	213	07
2070	213	07
2100	214	07
2130	214	07
2160	214	07
2190	214	07
2220	214	07
2250	214	07
2280	214	07
2310	214	08
2340	214	08
2370	214	08
2400	212	08
2430	212	08
2460	211	09
2490	211	09
2520	210	09
2550	210	09

STATION ALTITUDE 4120.59 FEET MSL
13 AUG. 79
ASCENSION NO. 427

SIGNIFICANT LEVEL DATA
22590.0247
HOLLOWMAN

STATION ALTITUDE 4120.59 FEET MSL
13 AUG. 79
ASCENSION NO. 427

TABLE 4

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	
876.4	27.0	15.7	50.0
850.0	22.8	13.0	54.0
791.4	16.8	11.3	71.0
773.8	15.6	9.1	65.0
770.9	14.8	9.0	71.0
761.2	15.6	5.8	82.0
726.0	13.4	2.3	47.0
700.0	11.0	2.1	54.0
685.5	9.9	-2.4	42.0
667.1	8.2	1.4	62.0
623.4	4.5	-1.3	56.0
597.2	2.1	-1.7	76.0
545.6	-2.6	-4.8	85.0
510.4	-6.5	-7.2	95.0
500.0	-7.2	-8.1	86.0
480.6	-8.9	-19.8	66.0
472.8	-8.7	-13.0	71.0
462.8	-10.0	-14.4	70.0
457.2	-10.7	-17.5	57.0
439.5	-12.9	-17.2	70.0
424.7	-13.6	-19.5	61.0
400.0	-16.3	-21.5	64.0
363.0	-21.0	-27.0	58.0
336.0	-24.4	-36.3	52.0
300.0	-31.2	-45.0	44.0
274.2	-36.5	-47.4	51.0
262.8	-38.8	-49.7	50.0
250.0	-42.5		
200.0	-54.0		
153.8	-56.9		
150.0	-67.4		
137.6	-62.2		
115.0	-65.0		
101.6	-65.5		
100.0	-67.7		
86.8	-64.3		
82.8	-64.0		
70.0	-58.7		
50.4	-54.5		
50.0	-56.3		

STATION ALTITUDE 4126.59 FEET MSL
 13 AUG. 79 1350 HRS MST
 ASCENSION NO. 427

SIGNIFICANT LEVEL DATA
 2250010427
 HOLLOWAY

GEODETIC COORDINATES
 32.86865 LAT DEG
 106.09965 LONG DEG

TABLE 4 Cont.

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR CENTIGRADE	REL. HUM. PERCENT
37.8 75113.8	-52.6	
33.2 77022.4	-53.1	

STATION ALTITUDE 4120.59 FEET MSL
13 AUG. 79
ASCENSION NO. 427

UPPER AIR DATA
22500.0427
HOLLOWAY

GEODETIC COORDINATES
32.68865 LAT DEG
106.09965 LONG DEG

TABLE 5

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (T)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4120.6	876.4	27.0	50.0	1009.3	677.9	270.0	2.9	1.000300
4500.0	850.1	25.2	51.7	1002.8	675.4	267.2	2.2	1.000294
5000.0	830.3	22.8	54.0	994.0	672.5	323.5	1.9	1.000287
5500.0	815.4	21.3	59.1	981.6	670.8	357.0	2.3	1.000283
6000.0	800.8	19.9	62.3	967.4	669.1	308.2	1.9	1.000260
6500.0	786.5	18.4	65.5	957.3	667.4	264.7	2.6	1.000276
7000.0	772.4	16.9	70.7	945.5	665.7	221.4	4.1	1.000272
7500.0	758.4	15.9	66.6	932.6	664.3	219.7	5.5	1.000263
8000.0	744.6	15.3	58.7	918.7	663.4	217.5	5.5	1.000251
8500.0	731.0	15.0	50.6	904.1	662.7	226.4	5.6	1.000241
9000.0	717.6	14.1	48.7	890.8	661.6	240.4	6.0	1.000235
9500.0	704.4	13.3	47.4	877.8	660.5	243.2	6.5	1.000229
10000.0	691.4	12.1	50.3	865.6	659.2	223.3	6.8	1.000226
10500.0	678.6	10.9	52.9	853.9	657.5	217.0	7.5	1.000223
11000.0	666.0	9.9	42.4	841.7	655.4	209.0	8.5	1.000212
11500.0	653.5	8.6	35.3	829.2	653.3	200.7	9.2	1.000214
12000.0	641.2	7.7	32.5	817.0	651.1	208.4	9.4	1.000214
12500.0	629.1	6.7	33.6	805.0	652.9	204.1	9.8	1.000210
13000.0	617.2	5.7	34.7	793.2	651.7	196.0	10.4	1.000206
13500.0	605.5	4.7	35.8	781.6	650.2	187.1	10.9	1.000202
14000.0	593.9	3.6	32.5	770.0	649.2	181.4	11.5	1.000199
14500.0	582.5	2.6	73.9	758.6	648.0	188.4	11.5	1.000196
15000.0	571.2	1.6	77.0	747.2	646.8	191.9	11.8	1.000193
15500.0	560.1	.6	76.9	735.9	645.5	198.0	12.6	1.000189
16000.0	549.2	-.4	80.2	724.7	644.4	199.5	13.4	1.000186
16500.0	538.5	-1.4	82.7	713.8	643.2	199.3	14.2	1.000182
17000.0	528.1	-2.4	84.3	703.0	642.0	200.3	15.4	1.000179
17500.0	517.6	-3.5	87.3	692.5	640.7	201.4	16.7	1.000176
18000.0	507.4	-4.6	90.1	681.2	639.5	201.2	18.2	1.000173
18500.0	497.3	-5.7	93.0	670.0	638.3	201.0	19.5	1.000169
19000.0	487.4	-6.7	92.1	658.7	637.7	200.0	20.5	1.000166
19500.0	477.6	-7.4	96.0	647.6	636.3	200.0	21.6	1.000161
20000.0	468.0	-8.3	86.0	636.4	634.3	201.0	22.8	1.000158
20500.0	458.5	-8.8	81.8	625.5	634.0	201.1	23.9	1.000154
21000.0	449.2	-9.2	70.6	614.1	633.5	200.4	24.9	1.000149
21500.0	440.1	-10.3	63.8	603.0	632.0	199.3	25.7	1.000145
22000.0	431.1	-11.4	61.4	591.7	630.9	197.4	26.3	1.000142
22500.0	422.2	-12.6	68.0	580.4	629.3	195.4	27.6	1.000140
23000.0	413.5	-13.6	65.4	569.2	628.2	194.7	29.5	1.000137
23500.0	405.0	-15.0	61.2	557.7	626.7	193.0	31.4	1.000134

GEODETIC COORDINATES
32-88865 LAT DEG
108-09965 LONG DEG

UPPER AIR DATA
2250010427
HOLLOMAN

STATION ALTITUDE 4126.59 FEET MSL
13 AUG. 79
ASCENSION NO. 427

TABLE 5 Cont

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEGREE POINT CENTIGRADE	REL HUM. PERCENT	DENSITY G/CM ³	SPEED OF SOUND METER	WIND DATA DIRECTION USGREGS (T)	SPEED KNOTS	INJEX OF REFRACTION
24000.0	416.5	-14.5	-20.1	62.0	550.3	626.9	192.0	33.0	1.000132
24500.0	408.2	-15.4	-20.8	63.0	551.1	625.8	189.5	33.8	1.000129
25000.0	400.1	-16.3	-21.5	64.0	542.1	624.7	185.7	33.8	1.000127
25500.0	392.1	-17.3	-22.6	62.8	533.3	623.5	182.4	34.2	1.000124
26000.0	384.2	-18.3	-23.8	61.5	524.6	622.2	179.0	34.7	1.000122
26500.0	376.4	-19.2	-25.0	60.2	516.0	621.0	176.1	35.5	1.000120
27000.0	368.6	-20.2	-26.1	59.0	507.6	619.8	177.3	36.6	1.000117
27500.0	361.4	-21.2	-27.5	56.5	499.3	618.6	177.4	36.0	1.000115
28000.0	354.0	-22.1	-29.3	49.5	490.9	617.4	177.5	39.6	1.000112
28500.0	346.7	-23.0	-32.2	42.6	482.7	616.3	176.5	40.9	1.000110
29000.0	339.6	-23.9	-34.5	35.0	474.5	615.1	179.6	42.1	1.000108
29500.0	332.6	-25.0	-37.1	31.3	466.6	613.8	181.1	41.3	1.000106
30000.0	325.5	-25.3	-38.7	29.8	459.4	612.2	182.0	40.4	1.000104
30500.0	318.8	-27.6	-40.3	28.3	452.1	610.6	183.4	39.6	1.000102
31000.0	312.1	-28.8	-41.9	26.3	445.0	609.0	183.3	38.8	1.000100
31500.0	305.6	-30.1	-43.5	25.3	438.0	607.4	182.1	36.1	1.000098
32000.0	299.2	-31.4	-45.1	24.2	431.0	605.8	180.7	37.5	1.000097
32500.0	292.3	-32.9	-45.6	25.9	424.0	604.2	179.1	36.9	1.000095
33000.0	286.5	-33.9	-46.1	27.6	417.2	602.6	177.0	36.3	1.000094
33500.0	280.4	-35.2	-46.7	29.3	410.4	601.0	176.4	35.8	1.000092
34000.0	274.4	-36.5	-47.4	30.9	403.8	599.4	175.1	35.4	1.000090
34500.0	268.4	-37.7	-48.6	30.5	397.0	597.9	174.2	36.0	1.000089
35000.0	262.5	-38.9	-50.0	29.5**	390.4	596.3	173.3	36.6	1.000087
35500.0	256.8	-40.5	-56.4	16.1**	384.5	594.2	174.1	37.7	1.000086
36000.0	251.1	-42.2	-70.9	2.7**	378.7	592.1	175.2	39.3	1.000084
36500.0	245.4	-43.5			372.4	590.4	176.9	40.0	1.000083
37000.0	239.8	-44.6			366.6	588.9	178.6	41.0	1.000081
37500.0	234.4	-45.8			359.2	587.4	180.1	42.7	1.000080
38000.0	229.0	-47.0			352.8	585.3	180.4	44.8	1.000079
38500.0	223.8	-48.2			346.3	584.3	181.0	46.6	1.000077
39000.0	218.7	-49.4			340.5	582.8	180.7	48.1	1.000076
39500.0	213.7	-50.6			334.3	581.2	180.5	49.3	1.000075
40000.0	208.5	-51.3			328.7	579.7	179.4	46.7	1.000073
40500.0	204.1	-52.9			322.9	578.1	179.4	49.1	1.000072
41000.0	199.4	-54.1			317.2	576.5	179.2	47.6	1.000071
41500.0	194.6	-55.3			311.3	575.0	179.2	47.1	1.000069
42000.0	190.0	-56.5			305.5	573.4	179.0	46.8	1.000068
42500.0	185.4	-57.7			299.0	571.8	178.4	46.6	1.000067
43000.0	180.9	-58.9			294.2	570.2	178.4	45.7	1.000066
43500.0	176.6	-60.1			289.6	568.6	178.1	44.5	1.000064

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL
13 AUG. 79
ASCENSION NO. 427

UPPER AIR DATA
2250010427
HOLLOWMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LONG DEG

TABLE 5 Cont.

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
44000.0	172.3	-61.3		283.4	567.0	177.6	44.1	1.000063
44500.0	168.2	-62.5		275.2	565.4	177.0	44.0	1.000062
45000.0	164.1	-63.7		273.0	563.8	177.6	44.1	1.000061
45500.0	160.2	-64.9		266.0	562.2	177.9	44.4	1.000060
46000.0	156.3	-66.1		263.0	560.6	178.7	44.9	1.000059
46500.0	152.5	-67.1		257.9	559.3	180.3	46.0	1.000057
47000.0	148.8	-67.5		252.0	558.7	181.7	46.6	1.000056
47500.0	145.0	-67.7		246.0	558.4	181.5	44.9	1.000055
48000.0	141.4	-67.9		240.1	558.1	181.2	43.0	1.000053
48500.0	137.9	-68.2		234.4	557.3	182.2	40.1	1.000052
49000.0	134.5	-67.9		228.3	556.1	184.2	36.5	1.000051
49500.0	131.2	-67.6		222.3	555.3	186.4	33.1	1.000050
50000.0	127.9	-67.3		216.5	554.9	188.4	29.8	1.000048
50500.0	124.7	-67.0		210.8	554.4	190.4	26.6	1.000047
51000.0	121.6	-66.7		205.2	553.8	190.4	23.5	1.000046
51500.0	118.6	-66.4		199.8	553.2	192.8	20.8	1.000045
52000.0	115.7	-66.1		194.6	552.6	190.3	19.8	1.000043
52500.0	112.8	-66.4		189.1	552.2	182.8	20.5	1.000042
53000.0	110.0	-66.9		183.6	551.3	159.1	20.8	1.000041
53500.0	107.3	-67.4		181.5	550.8	182.6	19.6	1.000040
54000.0	104.6	-67.9		177.6	550.1	187.3	18.6	1.000039
54500.0	102.0	-68.4		173.6	557.4	174.5	18.0	1.000039
55000.0	99.5	-67.6		169.6	555.6	180.3	17.7	1.000038
55500.0	97.0	-66.8		163.8	554.6	178.1	17.4	1.000036
56000.0	94.6	-65.1		159.2	553.3	173.9	17.2	1.000035
56500.0	92.3	-63.4		154.6	551.3	170.4	15.6	1.000034
57000.0	90.0	-64.7		150.3	552.3	178.6	13.4	1.000033
57500.0	87.8	-64.3		146.4	553.1	181.3	11.2	1.000033
58000.0	85.7	-64.1		142.6	553.2	173.7	9.0	1.000032
58500.0	83.6	-64.0		139.2	553.4	166.3	6.8	1.000031
59000.0	81.6	-63.5		135.3	554.1	147.7	5.7	1.000030
59500.0	79.5	-62.7		131.8	553.1	124.4	6.4	1.000029
60000.0	77.7	-62.0		128.1	553.1	110.3	7.5	1.000029
60500.0	75.8	-61.2		124.6	557.2	113.4	6.6	1.000028
61000.0	74.0	-60.4		121.1	556.2	123.2	5.6	1.000027
61500.0	72.2	-59.7		117.8	555.2	124.9	6.2	1.000026
62000.0	70.4	-58.9		114.5	570.2	133.5	6.7	1.000026
62500.0	68.8	-58.4		111.5	571.3	130.3	7.3	1.000025
63000.0	67.1	-57.9		108.7	571.3	134.6	7.6	1.000024
63500.0	65.6	-57.4		105.9	572.2	134.3	7.9	1.000024

STATION ALTITUDE 4126.59 FEET MSL
13 AUG. 79 1350 HRS MST
ASCENSION NO. 427

UPPER AIR DATA
2250010427
HOLLANDMAN

GEODETIC COORDINATES
32.88365 LAT DEG
106.09965 LON DEG

TABLE 5 Cont.

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUB. C METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (TH)	SPEED KNOTS	INDEX OF REFRACTION
64000.0	64.0	-57.0		103.2	574.6	139.0	7.1	1.000023
64500.0	62.5	-56.5		100.5	573.4	144.7	6.2	1.000022
65000.0	61.0	-56.0		97.9	574.0	151.6	7.3	1.000022
65500.0	59.6	-55.6		95.4	574.7	161.2	8.9	1.000021
66000.0	58.2	-55.1		93.0	573.3	166.5	11.8	1.000021
66500.0	56.8	-54.6		90.6	573.9	175.1	15.7	1.000020
67000.0	55.5	-54.7		88.5	573.7	185.1	19.0	1.000020
67500.0	54.2	-55.1		86.6	573.3	195.3	19.5	1.000019
68000.0	52.9	-55.5		84.7	574.3	205.3	20.1	1.000019
68500.0	51.7	-55.6		82.8	574.3	215.3	20.3	1.000018
69000.0	50.5	-56.2		81.0	573.9	225.6	19.8	1.000018
69500.0	49.3	-56.1		79.1	573.9	235.6	19.3	1.000018
70000.0	48.1	-55.3		77.1	574.4	245.6	19.1	1.000017
70500.0	47.0	-55.5		75.2	574.8	255.7	19.0	1.000017
71000.0	45.9	-55.2		73.4	573.2	265.7	19.1	1.000016
71500.0	44.6	-54.9		71.6	573.0	275.7	19.9	1.000016
72000.0	43.8	-54.5		69.8	570.0	285.7	20.7	1.000016
72500.0	42.8	-54.2		68.1	570.4	295.7	21.6	1.000015
73000.0	41.8	-53.9		66.4	570.8	305.7	22.3	1.000015
73500.0	40.8	-53.6		64.7	577.2	315.7	23.2	1.000014
74000.0	39.8	-53.3		63.1	577.6	325.7	24.0	1.000014
74500.0	38.9	-53.0		61.6	573.1	335.7	24.1	1.000014
75000.0	38.0	-52.7		60.0	573.3	345.7	24.1	1.000013
75500.0	37.1	-52.7		58.7	573.5	355.7	24.1	1.000013
76000.0	36.3	-52.3		57.3	573.4	365.7	24.1	1.000013
76500.0	35.4	-52.9		56.0	576.2	375.7	24.1	1.000012
77000.0	34.6	-52.9		54.7	576.1	385.7	24.1	1.000012
77500.0	33.8	-53.0		53.5	578.0	395.7	24.1	1.000012

STATION ALTITUDE 4120.59 FEET MSL
13 AUG. 79 1350 HRS MST
ASCENSION NO. 427

MANDATORY LEVELS
2250010427
HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 6

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5006.	22.8	13.0	54.	320.2	1.9
800.0	6727.	17.7	11.8	60.	240.7	3.1
750.0	8530.	14.9	4.7	50.	249.2	5.7
700.0	10435.	11.0	2.1	54.	218.0	7.4
650.0	12451.	6.8	..	64.	204.8	9.7
600.0	14595.	2.4	-1.0	75.	187.3	11.5
550.0	16837.	-2.2	-4.5	84.	200.3	13.2
500.0	19331.	-7.2	-9.1	80.	200.4	21.3
450.0	22028.	-11.6	-17.3	62.	197.3	20.4
400.0	24968.	-16.3	-21.3	64.	185.7	33.8
350.0	28224.	-22.6	-31.1	40.	170.0	40.3
300.0	31878.	-31.2	-45.0	24.	180.9	37.6
250.0	36021.	-42.5			175.4	39.2
200.0	40844.	-54.0			179.2	47.7
175.0	43814.	-60.6			178.0	44.2
150.0	46708.	-67.4			181.3	45.7
125.0	50303.	-67.0			190.5	27.0
100.0	54727.	-67.7			180.1	17.8
80.0	59190.	-62.9			130.4	0.1
70.0	61913.	-58.7			136.5	0.8
60.0	65114.	-55.7			124.5	8.3
50.0	68931.	-53.3			127.7	19.6
40.0	73613.	-53.3			103.9	23.9

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
13 AUG. 79
ASCENSION NO. 79

SIGNIFICANT LEVEL DATA
22500J0079
JALLEN
TABLE 7

GEODETIC COORDINATES
33.18712 LAT DEG
106.49511 LOG DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
379.3	4051.0	22.8	15.4	47.0
559.4	5379.5	24.4	15.5	50.0
550.0	5028.5	23.0	15.2	54.0
792.7	7011.3	17.4	11.3	70.0
700.0	10405.5	10.9	.5	48.0
632.0	10246.1	6.5	-4.7	45.0
585.3	13387.5	.5	-1.9	54.0
559.6	10481.1	-1.9	-4.9	74.0
548.4	17011.4	-2.2	-4.5	64.0
500.0	19809.7	-6.5	-9.5	79.0
482.4	20527.1	-9.4	-9.9	95.0
466.7	21167.6	-10.6	-12.1	89.0
461.4	21457.4	-9.3	-19.5	45.0
432.2	23177.9	-13.1	-18.3	77.0
430.0	25037.5	-16.6	-21.1	58.0
354.2	27357.7	-21.1	-25.0	67.0
345.2	35535.2	-23.1	-30.4	51.0
300.0	31507.3	-33.9	-40.7	37.0
271.0	34313.6	-33.9	-49.3	26.0
250.0	36132.1	-41.2		
200.0	40833.8	-53.5		
156.8	45002.7	-66.1		
130.0	40809.2	-66.1		
137.8	43574.5	-58.8		
112.6	52588.5	-65.5		
100.0	54670.8	-66.5		
83.2	58635.5	-65.5		
70.0	62110.3	-53.8		
69.5	63231.4	-55.7		
50.0	69253.6	-54.8		
30.0	80170.4	-59.5		
20.0	80995.0	-46.7		
16.2	93634.1	-45.6		
12.9	98716.5	-40.8		

STATION ALTITUDE 4051.00 FEET MSL
13 AUG. 79 1350 HRS MST
ASCENSION NO. 79

UPPER AIR DATA
225000Z079
JALLEN

GEODETIC COORDINATES
J3-16712 LAT DEG
106-49511 LON DEG

TABLE 8

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND M/SEC	WIND DATA DIRECTION DEGREES (T)	WIND SPEED KNOTS	INDEX OF REFRACTION
4051.0	879.3	28.8	47.0	1000.3	679.7	190.0	6.0	1.000302
4500.0	859.0	24.1	50.7	1007.7	674.0			1.000290
5000.0	830.8	23.1	53.8	993.9	672.8			1.000267
5500.0	800.0	21.7	57.0	981.2	671.2			1.000264
6000.0	781.4	20.3	61.8	969.7	669.8			1.000261
6500.0	767.1	18.0	65.9	958.4	668.0			1.000277
7000.0	753.0	17.4	69.9	944.4	666.0			1.000273
7500.0	739.9	16.5	73.7	931.1	665.0			1.000264
8000.0	725.0	15.5	77.1	918.0	663.8			1.000256
8500.0	711.3	14.5	80.5	905.0	662.5			1.000248
9000.0	697.9	13.7	84.2	892.2	661.3			1.000240
9500.0	684.6	12.7	87.9	879.8	660.1			1.000233
10000.0	671.9	11.8	91.0	867.1	659.8			1.000226
10500.0	659.1	10.8	94.0	854.7	659.0			1.000220
11000.0	646.4	10.0	97.4	841.7	658.0			1.000215
11500.0	633.9	9.2	100.0	829.0	657.0			1.000211
12000.0	621.8	8.4	103.0	816.4	654.8			1.000206
12500.0	609.6	7.5	106.0	804.0	653.8			1.000202
13000.0	597.7	6.7	109.0	791.8	652.8			1.000198
13500.0	586.0	5.9	112.0	780.2	651.8			1.000196
14000.0	574.4	5.1	115.0	769.3	649.6			1.000195
14500.0	563.0	4.3	118.0	758.5	648.3			1.000194
15000.0	551.6	3.5	121.0	748.0	647.0			1.000193
15500.0	540.8	2.7	124.0	737.5	645.4			1.000191
16000.0	530.2	1.9	127.0	727.3	644.5			1.000185
16500.0	520.2	1.1	130.0	717.6	643.7			1.000181
17000.0	510.2	0.3	133.0	708.2	642.5			1.000179
17500.0	500.2	-0.5	136.0	699.2	641.1			1.000175
18000.0	490.2	-1.3	139.0	690.4	640.0			1.000171
18500.0	480.2	-2.1	142.0	681.4	638.9			1.000168
19000.0	470.2	-2.9	145.0	672.7	637.6			1.000164
19500.0	460.2	-3.7	148.0	664.2	636.5			1.000161
20000.0	450.2	-4.5	151.0	655.2	635.8			1.000159
20500.0	440.2	-5.3	154.0	646.4	634.8			1.000156
21000.0	430.2	-6.1	157.0	637.8	633.1			1.000152
21500.0	420.2	-6.9	160.0	629.5	632.2			1.000143
22000.0	410.2	-7.7	163.0	621.5	631.3			1.000142
22500.0	400.2	-8.5	166.0	613.5	630.1			1.000140
23000.0	390.2	-9.3	169.0	605.5	629.0			1.000139
23500.0	380.2	-10.1	172.0	597.7	627.8			1.000136

AN WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 4051.00 FEET MSL
13 AUG. 79 1350 HRS MST
ASCENSION NO. 79

UPPER AIR DATA
2250000079
CALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 8 Cont.

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	TEMPERATURE DEWPOINT CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND METER KNOTS	DIRECTION DEGREES (TU)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	417.0	-14.7	-18.5	72.8	561.4	526.7	191.5	29.6	1.000133
24200.0	406.7	-15.6	-19.7	70.5	552.2	625.5	190.0	31.5	1.000130
25000.0	400.6	-16.5	-21.0	68.2	543.2	624.4	168.5	33.2	1.000128
25500.0	392.5	-17.5	-22.0	67.0	534.4	623.2	166.7	33.5	1.000125
26000.0	384.6	-18.5	-23.0	67.6	525.6	622.0	165.3	34.0	1.000123
26500.0	376.9	-19.5	-23.9	67.4	517.0	620.8	164.0	35.0	1.000120
27000.0	369.2	-20.4	-24.9	67.1	508.6	619.6	164.0	36.1	1.000118
27500.0	361.8	-21.4	-26.1	65.0	500.1	618.4	163.5	37.3	1.000116
28000.0	354.4	-22.1	-26.0	58.8	491.5	617.4	163.4	38.4	1.000113
28500.0	347.1	-22.9	-29.9	52.7	482.9	616.5	164.2	39.6	1.000111
29000.0	339.3	-23.0	-31.5	49.5	473.0	615.1	164.7	40.7	1.000108
29500.0	332.9	-25.1	-33.0	47.4	467.3	613.7	164.9	41.8	1.000106
30000.0	325.3	-26.3	-34.6	45.3	459.6	612.2	164.4	43.0	1.000104
30500.0	319.1	-27.5	-36.1	43.2	452.4	610.7	163.5	44.3	1.000102
31000.0	312.5	-28.6	-37.7	41.1	445.1	609.3	163.5	44.5	1.000101
31500.0	306.0	-29.8	-39.3	39.0	437.9	607.6	164.0	44.1	1.000099
32000.0	299.5	-31.0	-40.9	36.8	430.9	606.3	164.1	44.2	1.000097
32500.0	293.2	-32.3	-42.5	34.5	423.9	604.7	164.1	44.5	1.000095
33000.0	286.9	-33.5	-44.4	32.2	417.0	603.1	163.1	45.3	1.000094
33500.0	280.7	-34.3	-45.2	29.8	410.3	601.5	161.9	46.2	1.000092
34000.0	274.7	-36.1	-46.1	27.5	403.7	599.0	161.0	45.4	1.000090
34500.0	268.8	-37.3	-50.5	23.3**	397.0	596.5	160.1	44.4	1.000089
35000.0	262.9	-38.5	-54.6	16.2**	390.3	596.8	179.7	45.3	1.000087
35500.0	257.1	-39.7	-63.2	9.1**	383.7	595.2	179.3	46.6	1.000086
36000.0	251.5	-40.9	-72.1	1.9**	377.2	593.7	179.1	48.7	1.000084
36500.0	245.8	-42.1			370.7	592.1	178.9	51.0	1.000083
37000.0	240.3	-43.7			364.4	590.4	173.5	51.5	1.000081
37500.0	234.8	-44.7			358.1	588.8	177.7	51.6	1.000080
38000.0	229.5	-45.0			352.0	587.1	177.9	51.1	1.000078
38500.0	224.3	-47.3			346.0	585.4	178.4	50.3	1.000077
39000.0	219.2	-48.6			340.1	583.7	179.1	50.0	1.000076
39500.0	214.2	-49.3			334.5	582.1	180.0	50.1	1.000074
40000.0	209.3	-51.2			328.6	580.4	180.7	50.0	1.000073
40500.0	204.6	-53.6			317.8	577.0	181.3	49.6	1.000072
41000.0	199.9	-55.0			311.7	573.5	182.1	50.0	1.000069
41500.0	195.1	-56.3			305.9	573.7	182.1	50.2	1.000068
42000.0	189.9	-57.5			300.3	572.1	181.3	50.0	1.000067
42500.0	184.4	-58.7			294.8	570.5	180.5	49.6	1.000066
43000.0	177.1	-60.0			289.3	568.9	179.4	47.4	1.000064

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

UPPER AIR DATA
245000079
JALLEN

STATION ALTITUDE 4051.00 FEET MSL
10 AUG. 79 1350 GRS MST
ASCENSION NO. 79

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 8 Cont.

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES JUNPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4000.0	172.0	-61.2		254.0	567.2	176.1	45.3	1.000063
4000.0	168.7	-62.4		270.6	565.3	177.5	44.2	1.000062
4000.0	164.6	-63.6		273.7	563.9	177.0	43.2	1.000061
4000.0	160.7	-64.9		269.7	562.2	177.5	42.9	1.000060
4000.0	156.8	-66.1		265.8	560.3	178.3	42.9	1.000059
4000.0	152.0	-67.1		257.3	556.9	179.5	42.2	1.000057
4700.0	149.2	-68.3		251.2	553.3	180.4	40.6	1.000056
4750.0	145.5	-67.1		245.9	557.2	181.5	39.1	1.000055
4800.0	141.8	-67.9		240.7	555.2	181.8	37.6	1.000054
4850.0	138.3	-66.7		235.7	557.4	182.3	36.1	1.000052
4900.0	134.9	-66.4		229.5	557.4	183.5	32.4	1.000051
4950.0	131.5	-66.0		223.4	556.0	189.2	28.6	1.000050
5000.0	128.3	-67.6		217.4	550.5	190.5	26.6	1.000048
5050.0	125.1	-67.2		211.9	549.4	189.5	25.6	1.000047
5100.0	122.0	-66.6		205.9	559.6	189.9	24.9	1.000046
5150.0	119.0	-66.4		200.4	560.2	179.6	25.2	1.000045
5200.0	116.0	-66.0		195.1	560.9	172.9	25.9	1.000043
5250.0	113.1	-65.5		189.8	561.3	172.0	25.1	1.000042
5300.0	110.3	-65.6		185.2	561.2	171.6	24.1	1.000041
5350.0	107.6	-65.8		180.9	561.0	174.6	23.5	1.000040
5400.0	105.0	-66.0		175.3	560.7	174.3	22.5	1.000039
5450.0	102.4	-66.1		172.3	560.5	173.4	21.6	1.000038
5500.0	99.9	-66.3		168.2	560.3	175.2	20.5	1.000037
5550.0	97.4	-66.2		163.9	560.5	175.0	19.3	1.000037
5600.0	95.0	-66.1		159.0	560.6	175.1	15.9	1.000036
5650.0	92.7	-65.0		155.9	560.6	170.2	12.6	1.000035
5700.0	90.4	-64.9		151.9	560.3	169.1	9.5	1.000034
5750.0	88.1	-64.8		148.0	561.0	161.5	7.2	1.000033
5800.0	85.0	-65.6		144.5	561.2	153.6	4.9	1.000032
5850.0	82.6	-65.5		140.7	561.0	154.0	4.5	1.000031
5900.0	81.8	-64.6		136.6	562.3	153.9	5.9	1.000030
5950.0	79.8	-63.9		132.9	563.6	159.9	7.4	1.000029
6000.0	77.9	-62.9		129.1	564.6	171.2	6.5	1.000028
6050.0	76.0	-62.6		125.4	563.1	172.6	5.4	1.000027
6100.0	74.2	-61.6		121.9	567.4	173.0	4.3	1.000026
6150.0	72.4	-60.1		118.0	565.6	171.0	4.7	1.000026
6200.0	70.6	-59.1		115.0	569.9	169.9	4.7	1.000026
6250.0	68.9	-57.9		111.0	571.6	167.0	5.6	1.000025
6300.0	67.3	-56.4		106.2	573.3	147.9	6.3	1.000024
6350.0	65.7	-55.7		103.3	574.3	142.0	6.0	1.000023

STATION ALTITUDE 4051.00 FEET MSL
13 AUG. 79
ASCENSION NO. 79

UPPER AIR DATA
225000007,
JALLEN

GEOCLIC COORDINATES
33.18712 LAT DEG
106.49511 LONG DEG

TABLE 8 Cont.

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY G/CM ³	SPEED OF SOUND M/SEC	WIND DATA DIRECTION DEGREES (T)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
6500.0	94.2	-55.6		102.8	574.9	140.5	8.5	1.000023
6450.0	94.7	-55.5		100.5	574.7	134.7	8.9	1.000022
6400.0	95.2	-55.4		97.9	574.8	134.5	9.8	1.000022
6350.0	95.9	-55.4		95.6	574.9	130.5	11.1	1.000021
6300.0	96.4	-55.3		93.3	575.0	127.1	12.4	1.000021
6250.0	97.0	-55.2		91.1	575.1	121.8	14.5	1.000020
6200.0	97.7	-55.1		89.0	575.2	117.5	16.7	1.000020
6150.0	98.4	-55.1		86.9	575.3	115.5	18.6	1.000019
6100.0	99.1	-55.0		84.8	575.4	113.4	19.9	1.000019
6050.0	99.8	-54.9		82.8	575.5	111.2	21.0	1.000018
6000.0	100.6	-54.8		80.8	575.6	109.0	22.1	1.000018
5950.0	101.4	-54.7		78.9	575.8	107.5	23.2	1.000018
5900.0	102.3	-54.5		77.0	575.7	107.1	24.2	1.000017
5850.0	103.2	-54.3		75.1	575.5	105.5	24.9	1.000017
5800.0	104.1	-54.1		73.0	575.8	103.2	24.6	1.000016
5750.0	105.0	-53.9		71.0	575.6	101.0	24.4	1.000016
5700.0	105.9	-53.7		69.0	575.4	119.9	23.5	1.000016
5650.0	106.8	-53.5		67.2	577.5	114.5	21.6	1.000015
5600.0	107.7	-53.3		65.3	577.8	111.2	19.7	1.000015
5550.0	108.6	-53.1		63.4	577.9	107.5	18.6	1.000014
5500.0	109.5	-52.9		61.5	578.1	105.1	18.3	1.000014
5450.0	110.4	-52.7		59.6	578.4	98.7	18.1	1.000014
5400.0	111.3	-52.5		57.7	578.6	95.5	19.1	1.000013
5350.0	112.2	-52.3		55.9	578.9	93.5	21.3	1.000013
5300.0	113.1	-52.1		54.1	579.2	91.7	23.5	1.000013
5250.0	114.0	-51.9		52.3	579.4	91.0	25.4	1.000012
5200.0	114.9	-51.7		50.5	579.7	91.4	26.7	1.000012
5150.0	115.8	-51.5		48.7	579.9	91.7	28.1	1.000012
5100.0	116.7	-51.4		46.9	580.2	92.0	29.2	1.000012
5050.0	117.6	-51.2		45.1	580.4	92.2	29.6	1.000011
5000.0	118.5	-51.0		43.3	580.7	92.5	30.1	1.000011
4950.0	119.4	-50.8		41.5	581.0	92.8	30.5	1.000011
4900.0	120.3	-50.6		39.7	581.2	90.8	30.4	1.000011
4850.0	121.2	-50.4		37.9	581.5	87.4	30.4	1.000010
4800.0	122.1	-50.1		36.1	581.8	85.5	29.1	1.000010
4750.0	123.0	-49.9		34.3	582.1	83.6	27.8	1.000010
4700.0	123.9	-49.7		32.5	582.4	81.5	26.5	1.000009
4650.0	124.8	-49.5		30.7	582.7	82.1	25.6	1.000009
4600.0	125.7	-49.3		28.9	583.0	83.1	24.7	1.000009

STATION ALTITUDE 4051.00 FEET MSL
13 AUG. 79 1350 HRS MST
ASCENSION NO. 79

UPPER AIR DATA
2500000079
JALLER

GEODETTIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 8 Cont.

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND METERS PER SECOND	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
94000.0	25.2	-48.9		39.1	583.5	64.7	23.6	1.000009
94500.0	24.5	-48.5		39.2	583.7	64.8	24.7	1.000008
95000.0	24.0	-48.4		37.2	584.0	69.0	26.5	1.000008
95500.0	23.5	-48.2		35.4	584.3	90.9	28.4	1.000008
96000.0	23.0	-48.0		33.3	584.6	92.0	30.0	1.000008
96500.0	22.4	-47.8		34.7	584.9	92.3	31.4	1.000008
97000.0	21.9	-47.6		33.6	585.1	92.6	32.7	1.000008
97500.0	21.4	-47.3		33.0	585.4	92.9	34.0	1.000007
98000.0	20.9	-47.1		32.3	585.7	93.4	34.6	1.000007
98500.0	20.5	-46.9		31.5	586.0	93.6	35.1	1.000007
99000.0	20.0	-46.7		30.8	586.2	94.2	35.7	1.000007
99500.0	19.5	-46.6		30.1	586.4	94.2	37.0	1.000007
90000.0	19.1	-46.5		29.4	586.6	94.1	38.4	1.000007
90500.0	18.7	-46.3		28.7	586.7	94.0	39.8	1.000006
91000.0	18.3	-46.2		28.0	586.9	94.8	41.4	1.000006
91500.0	17.8	-46.1		27.4	587.0	95.6	43.4	1.000006
92000.0	17.4	-46.0		26.8	587.2	99.2	45.3	1.000006
92500.0	17.1	-45.9		26.1	587.3	99.7	47.2	1.000006
93000.0	16.7	-45.8		25.3	587.5	101.3	47.6	1.000006
93500.0	16.3	-45.6		25.0	587.6	103.0	48.1	1.000006
94000.0	15.9	-45.3		24.4	588.1	103.0	48.6	1.000005
94500.0	15.6	-44.8		23.8	588.7	104.7	48.5	1.000005
95000.0	15.2	-44.5		23.2	589.3	104.4	48.3	1.000005
95500.0	14.9	-43.9		22.6	589.9	104.0	48.1	1.000005
96000.0	14.6	-43.4		22.1	590.5			1.000005
96500.0	14.2	-42.9		21.6	591.2			1.000005
97000.0	13.9	-42.4		21.0	591.8			1.000005
97500.0	13.5	-41.9		20.5	592.4			1.000005
98000.0	13.3	-41.5		20.0	593.0			1.000004
98500.0	13.0	-41.0		19.5	593.6			1.000004

STATION ALTITUDE 4051.00 FEET MS.
13 AUG. 79 1330 HRS MST
ASCENSION NO. 79

PANDORA LEVELS
2250000079
CALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 9

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
550.0	5025.	23.0	13.2	54.	9999.0	9999.0XX
500.0	6740.	16.1	12.1	50.	9999.0	9999.0XX
750.0	8553.	14.5	6.9	50.	9999.0	9999.0XX
700.0	10457.	10.9	0	45.	232.0	6.5
550.0	12474.	7.6	-3.0	45.	221.7	7.5
600.0	14622.	2.5	-2.0	70.	204.7	9.0
550.0	16814.	-2.0	-4.0	80.	200.5	19.5
500.0	19050.	-6.5	-9.5	79.	191.2	24.7
450.0	22058.	-11.1	-17.0	57.	199.9	26.8
400.0	24997.	-13.6	-21.1	60.	188.4	33.2
350.0	28251.	-22.6	-29.1	55.	183.9	59.1
300.0	31905.	-30.9	-40.7	57.	164.1	44.2
250.0	36657.	-41.2			179.0	49.2
200.0	40939.	-53.0			181.0	45.5
175.0	43867.	-60.5			178.0	40.3
150.0	46764.	-65.1			180.2	41.0
125.0	50565.	-67.2			169.5	25.6
100.0	54803.	-65.3			175.2	20.6
80.0	59251.	-64.0			169.1	7.1
70.0	61959.	-58.5			180.0	4.9
60.0	65134.	-55.4			131.4	10.6
50.0	69004.	-54.8			124.4	22.5
40.0	73797.	-52.5			103.4	18.3
30.0	79629.	-50.5			90.2	30.4
25.0	83745.	-48.8			85.0	23.7
20.0	88376.	-45.7			94.2	33.7
15.0	94864.	-44.0			104.2	43.2

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

AX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.